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1 (hereinafter “Kish”). Applicant traverses these rejections and asks that they be
2 withdrawn and the case passed along to issuance.

3
4 **Claims 1-9**

5 As amended, **claim 1** recites an apparatus comprising [amendatory
6 language appears in bold italics]:

- 7
- 8 • a first device;
 - 9 • a first connector coupled to the first device;
 - 10 • a second connector coupled to the first connector through a first
11 plurality of conductors, wherein alternating pairs of conductors are
12 reversed such that at least one pair of conductors is reversed at a
crossover position ***located substantially*** closer to the first connector
than the second connector; and
 - a second device coupled to the second connector through a second
plurality of conductors.

13 In making out the rejection of claim 1, the Office Action states that Kish’s
14 crossover position must be at the mid-point between conductor pairs. Applicant
15 agrees. The Office Action then argues that “there are inherently plural of points
16 among plural of continuous points positioned from positions (30, 32) of a first
17 connector (10) to positions (52, 54) of a second connector (50) wherein said plural
18 of points are at positions closer to the first connector than the second connector.”
19 Applicant amends the language of claim 1 in order to clarify that the ***crossover***
20 position is ***located substantially*** closer to the first connector than the second
21 connector. Accordingly, for at least this reason, claim 1 is allowable.

22 **Claims 2-9** depend from claim 1 and, as such, are allowable as depending
23 from an allowable base claim. These claims are also allowable for their own
24 recited features which, in combination with those recited in claim 1, are neither
25

1 shown nor suggested by the cited references, either singly or in combination with
2 one another.

3
4 **Claims 10-14**

5 As amended, **claim 10** recites an apparatus comprising [amendatory
6 language appears in bold italics]:

- 7
- 8 • a first integrated circuit including a plurality of differential drivers;
 - 9 • a first connector coupled to the first integrated circuit;
 - 10 • a second connector coupled to the first connector through a plurality
11 of electrical conductors, wherein alternating pairs of the electrical
12 conductors are reversed such that at least one pair of conductors is
13 reversed at a ***crossover*** position ***located substantially*** closer to the
14 first connector than the second connector; and
 - 15 • a second integrated circuit coupled to the second connector, wherein
16 the second integrated circuit includes a plurality of differential
17 receivers.

18 In making out the rejection of claim 10, the Office Action states that Kish's
19 crossover position must be at the mid-point between conductor pairs. Applicant
20 agrees. The Office Action then argues that "there are inherently plural of points
21 among plural of continuous points positioned from positions (30, 32) of a first
22 connector (10) to positions (52, 54) of a second connector (50) wherein said plural
23 of points are at positions closer to the first connector than the second connector."
24 Applicant amends the language of claim 10 in order to clarify that the ***crossover***
25 position is ***located substantially*** closer to the first connector than the second
connector. Accordingly, for at least this reason, claim 10 is allowable.

26 **Claims 11-14** depend from claim 10 and, as such, are allowable as
27 depending from an allowable base claim. These claims are also allowable for their
28 own recited features which, in combination with those recited in claim 10, are

1 neither shown nor suggested by the cited references, either singly or in
2 combination with one another.

3
4 **Claims 15-21**

5 As amended, **claim 15** recites an apparatus comprising [amendatory
6 language appears in bold italics]:

- 7
- 8 • a printed circuit board;
 - 9 • a plurality of connectors disposed on the printed circuit board;
 - 10 • a first integrated circuit disposed on a first substrate, wherein the
11 first substrate is configured to be coupled to one of the plurality of
12 connectors;
 - 13 • a second integrated circuit disposed on a second substrate, wherein
14 the second substrate is configured to be coupled to one of the
15 plurality of connectors; and
 - 16 • a first plurality of electrical conductors coupled to the plurality of
17 connectors, wherein alternating pairs of conductors between adjacent
18 connectors are reversed such that at least one pair of conductors is
19 reversed at a ***crossover*** position ***located substantially*** closer to one
20 of the plurality of connectors than another of the plurality of
21 connectors.

22 In making out the rejection of claim 15, the Office Action states that Kish's
23 crossover position must be at the mid-point between conductor pairs. Applicant
24 agrees. The Office Action then argues that "there are inherently plural of points
25 among plural of continuous points positioned from positions (30, 32) of a first
connector (10) to positions (52, 54) of a second connector (50) wherein said plural
of points are at positions closer to the first connector than the second connector."
Applicant amends the language of claim 15 in order to clarify that the ***crossover***
position is ***located substantially*** closer to one of the plurality of connectors than

1 another of the plurality of connectors. Accordingly, for at least this reason, claim
2 15 is allowable.

3 **Claims 16-21** depend from claim 15 and, as such, are allowable as
4 depending from an allowable base claim. These claims are also allowable for their
5 own recited features which, in combination with those recited in claim 15, are
6 neither shown nor suggested by the cited references, either singly or in
7 combination with one another.

8
9 **Claims 26-31**

10 As amended, **claim 26** recites a method comprising [amendatory language
11 appears in bold italics]:

- 12
- 13 • generating a plurality of differential signals;
 - 14 • transmitting the plurality of differential signals through a first
15 connector and a second connector to a plurality of differential
16 receivers;
 - 17 • reversing the polarity of alternating differential signals at a ***crossover***
18 position ***located substantially*** closer to the first connector than the
19 second connector; and
 - 20 • reversing the polarity of alternating differential signals between the
21 second connector and the plurality of differential receivers.

18 In making out the rejection of claim 26, the Office Action states that Kish's
19 crossover position must be at the mid-point between conductor pairs. Applicant
20 agrees. The Office Action then argues that "there are inherently plural of points
21 among plural of continuous points positioned from positions (30, 32) of a first
22 connector (10) to positions (52, 54) of a second connector (50) wherein said plural
23 of points are at positions closer to the first connector than the second connector."
24 Applicant amends the language of claim 26 in order to clarify that the ***crossover***
25

1 position is *located substantially* closer to the first connector than the second
2 connector. Accordingly, for at least this reason, claim 26 is allowable.

3
4 **Claims 27-31** depend from claim 26 and, as such, are allowable as
5 depending from an allowable base claim. These claims are also allowable for their
6 own recited features which, in combination with those recited in claim 26, are
7 neither shown nor suggested by the cited references, either singly or in
8 combination with one another.

9
10 **Claims 32 and 34-35**

11 As amended, **claim 32** recites a method comprising [relevant amendatory
12 language appears in bold italics]:

- 13
- 14 • modifying a transmitter package such that the coupling coefficient of
the transmitter package is substantially the same as the coupling
coefficient of a receiver package;
 - 15 • transmitting multiple pairs of differential signals across a plurality of
conductors using the transmitter package;
 - 16 • reversing polarity of alternating pairs of differential signal
conductors such that at least one pair of conductors is reversed at a
17 ***crossover*** position ***located substantially*** closer to the transmitter
package than the receiver package; and
 - 18 • receiving the multiple pairs of differential signals using the receiver
package.
- 19
20

21 In making out the rejection of claim 32, the Office Action states that Kish's
22 crossover position must be at the mid-point between conductor pairs. Applicant
23 agrees. The Office Action then argues that "there are inherently plural of points
24 among plural of continuous points positioned from positions (30, 32) of a first
25 connector (10) to positions (52, 54) of a second connector (50) wherein said plural

1 of points are at positions closer to the first connector than the second connector.”
2 Applicant amends the language of claim 32 in order to clarify that the ***crossover***
3 position is ***located substantially*** closer to the transmitter package than the receiver
4 package. Accordingly, for at least this reason, claim 32 is allowable.

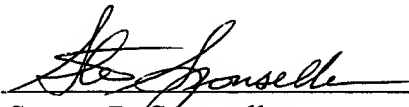
5 **Claims 34-35** depend from claim 32 and, as such, are allowable as
6 depending from an allowable base claim. These claims are also allowable for their
7 own recited features which, in combination with those recited in claim 32, are
8 neither shown nor suggested by the cited references, either singly or in
9 combination with one another.

10
11 **Conclusion**

12 All pending claims are in condition for allowance. Applicant respectfully
13 requests reconsideration and prompt issuance of the application. If any issues
14 remain that prevent issuance of this application, the Examiner is urged to contact
15 the undersigned attorney before issuing a subsequent Office Action.
16

17 Respectfully Submitted,

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19 Dated: 9-13-04

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